

Attorney Docket No. 070274-0001

PATENT APPL. SER. NO. 10/801,320

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently amended) An apparatus for grooming the bedding material in an animal free stall, the animal free stall having a stall rail separating it from an adjacent animal free stall, the apparatus comprising:

a boom adapted for connection to a vehicle, and having a proximal end and a distal end;

a rotary arm rotatably attached to the distal end of the boom, the rotary arm having a lower surface with a plurality of grooming members attached to the lower surface for grooming the bedding material, and wherein a plane in which the rotary arm rotates is at an angle of 1-15 degrees with respect to a surface on which the vehicle is resting; and

a motor for selectively rotating the rotary arm;

the rotary arm and grooming members together having a sufficiently low profile that the grooming members can groom the bedding material under the stall rail.

2. (Original) The apparatus of claim 1 further including an adapter assembly for rotatably connecting the boom to the vehicle; and

a curb guide attached to the boom to maintain position of the rotary arm with respect to the free stall.

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3. (Currently amended) ~~The apparatus of claim 2~~ An apparatus for grooming the bedding material in an animal free stall, the apparatus comprising:

a boom adapted for connection to a vehicle, and having a proximal end and a distal end;

a rotary arm rotatably attached to the distal end of the boom, the rotary arm having a lower surface with a plurality of grooming members attached to the lower surface, and wherein a plane in which the rotary arm rotates is at an angle of 1-15 degrees with respect to a surface on which the vehicle is resting; and

a motor for selectively rotating the rotary arm;

an adapter assembly for rotatably connecting the boom to the vehicle; and

a curb guide attached to the boom to maintain position of the rotary arm with respect to the free stall;

wherein the adapter assembly comprises:

a panel adapted for attachment to a vehicle frame with at least one bracket; and

a saddle member selectively attached to the panel, wherein the boom is rotatably attached to the saddle member.

4. (Original) The apparatus of claim 3 further including an actuator connected between the boom and the adapter assembly so that when the actuator is retracted, the boom is raised.

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5. (Original) The apparatus of claim 4 wherein the motor and the actuator are operated hydraulically.
6. (cancelled)
7. (Original) The apparatus of claim 3 further including a scraper assembly attached to the boom, the scraper assembly having a blade for pushing the bedding material back into the free stall.
8. (Original) The apparatus of claim 3 wherein a pitch angle of the rotary arm is adjusted by rotating the entire panel.
9. (Currently amended) ~~The apparatus of claim 1 wherein a roll angle of the rotary arm is 5 degrees~~ An apparatus for grooming the bedding material in an animal free stall, the apparatus comprising:
- a boom adapted for connection to a vehicle, and having a proximal end and a distal end;
- a rotary arm rotatably attached to the distal end of the boom, the rotary arm having a lower surface with a plurality of grooming members attached to the lower surface, and wherein a plane in which the rotary arm rotates is at an angle of about 5 degrees with respect to a surface on which the vehicle is resting; and
- a motor for selectively rotating the rotary arm.
10. (Original) An apparatus for grooming bedding material in barns, the apparatus comprising:

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- a boom having a proximal end and a distal end;
- a panel adapted for attachment to a vehicle;
- a saddle member selectively attached to the panel, wherein the proximal end of the boom is rotatably attached to the saddle member;
- a rotary arm rotatably attached to a distal end of the boom, the rotary arm having a lower surface with a plurality of grooming members attached to the lower surface, and wherein the pitch of the rotary arm is adjustable, and the roll ranges from 1 to 15 degrees with respect to a horizontal surface; and
- a motor for selectively rotating the rotary arm.

11. (Original) The apparatus of claim 10 further comprising:

- a scraper assembly attached to the boom, the scraper assembly having a blade for pushing the bedding material back into the free stall; and
- a curb guide attached to the boom to maintain position of the rotary arm with respect to the free stall.

12. (Original) The apparatus of claim 11 wherein the blade of the scraper assembly is biased so that it can scrape surfaces of varying heights.

13. (Original) The apparatus of claim 10 wherein the grooming members are blades attached to the rotary arm at an angle.

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14. (Original) The apparatus of claim 10 wherein the pitch angle is adjusted by rotating the panel.
15. (Original) The apparatus of claim 10 wherein the roll angle is 5 degrees.
16. (Original) The apparatus of claim 10 further including an actuator connected between the boom and the adapter assembly so that when the actuator is retracted, the boom is raised.
17. (Original) The apparatus of claim 16 wherein the motor and the actuator are hydraulically controlled from a single source of hydraulic fluid.
18. (Original) The apparatus of claim 16 wherein the rotary arm and grooming members have a combined height of less than 12.7 centimeters.
19. (Original) A method of grooming animal free stalls having a curb, comprising the steps of:
- attaching the grooming apparatus of claim 10 to a vehicle;
  - adjusting the pitch of the rotary arm;
  - actuating the motor to rotate the rotary arm; and
  - moving the curb guide along the curb.
20. (Currently amended) A rotary arm for a grooming apparatus for grooming animal bedding in connection with a plurality of adjacent animal free stalls, at least some adjacent pairs

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of animal free stalls separated by at least one stall rail, the apparatus having a boom, and a motor for rotating the rotary arm, the rotary arm comprising an elongated member having a plurality of grooming members attached at spaced intervals along a single ~~at least one~~ side of the elongated member, the rotary arm and grooming members together having a sufficiently low profile that the grooming members can groom the bedding material under the stall rail.

21. (Original) An apparatus for grooming bedding material in barns, the apparatus comprising:

a boom having a proximal end and a distal end;

an arm having a proximal end and a distal end;

a bracket connecting the distal end of the boom to the proximal end of the arm;

a rotary arm rotatably attached to a distal end of the arm, the rotary arm having a lower surface with a plurality of grooming members attached to the lower surface; and

a motor attached to the arm for selectively rotating the rotary arm.